



Implement Hashtable

1

Complete an implementation of the MyHashtable class in **either Java or Python**. This class is functionally similar to Java's Map interface, but has only get and put methods.

2

- You will be judged on code cleanliness, not just functionality. Write nice, clean code.
- The implementation should not allow key or value parameters to be null/None.
- It is OK to add a constructor for MyHashtable.
- Don't use the language's built-in HashMap/Hashtable implementation to solve this problem.
- A test harness is included.
- If get() is called for a key that doesn't exist, it should return null.

3

YOUR ANSWER

Java 7



```
1
2
3 import java.io.*;
4 import java.util.*;
5
6 public class MyHashtable<K, V> {
7     public static void main(String args[]) throws
      Exception {
8         new TestHarness(new MyHashtable<String, String>
9         ()).run();
10    }
11    public void put(K key, V value) {
12        // TODO implement
13    }
14
15    public V get(K key) {
```

```
16         // TODO implement
17         return null;
18     }
19
20     /**
21      * A helper class that tests MyHashtable by feeding
22      * it puts and gets from STDIN.
23      */
24     public static class TestHarness implements Runnable {
25         final MyHashtable<String, String> hashtable;
26
27         public TestHarness(MyHashtable<String, String>
28             hashtable) {
29             this.hashtable = hashtable;
30         }
31
32         public void run() {
33             Scanner scanner = new Scanner(System.in);
34             while (scanner.hasNext()) {
35                 String k = scanner.next();
36                 String v = null;
37                 if (k.contains("=")) {
38                     String[] split = k.split("\\=");
39                     k = split[0];
40                     v = split[1];
41                 }
42                 if (v == null) {
43                     System.out.println(hashtable.get(k));
44                 } else {
45                     hashtable.put(k, v);
46                 }
47             }
48         }
49
50     }
```

Line: 48 Col: 1

☐ Test against custom input

Run Code

Submit code & Continue

 [Download sample testcases](#)

The input/output files have Unix line endings. Do not

use Notepad to edit them on windows.

[About](#) [Privacy policy](#) [Terms of service](#)